CLAIMS:

1. An integrated circuit (1) comprising a set of cells (10), each cell (11, 13, 15, 19) comprising an electrical device (20) having a device parameter with a parameter value which is a function of random parametric variations, the set of cells (10) comprising:

- a first subset (12) of identification cells (13); and
- a second subset (14) of cells (11, 15,19) for generating an identification code by measuring the parameter values of the identification cells (13), characterized in that the identification cells (13) have first random parametric variations and the cells (11, 15, 19) of the second subset (14) have second random parametric variations, the first random parametric variations being larger than the second random parametric variations.

2. An integrated circuit (1) as claimed in Claim 1, characterized in that

- the first random parametric variations cause random differences among the parameter values of the identification cells (13), the random differences each having an absolute value, the absolute values having an average value; and
- the second random parametric variations cause an offset in the parameter values of the identification cells (13), the offset having an absolute value, the average value being larger than the absolute value of the offset.

3. An integrated circuit (1) as claimed in Claim 2, characterized in that the identification cells (13) each contain only one electrical device (20).

4. An integrated circuit (1) as claimed in Claim 1, characterized in that the random parametric variations comprise a random distribution of doping atoms (28) in at least a part of the electrical device (20).

5. An integrated circuit (1) as claimed in Claim 4, characterized in that the electrical device (20) comprises a metal oxide semiconductor field effect transistor (22) comprising a source (23), a drain (24), a gate (25), and a channel (26), which is situated between the source (23), the drain (24) and the gate (25), the channel (26) being electrically

insulated from the gate (25) by an oxide (27), the part of the electrical device (20) having the random distribution of doping atoms comprising the channel (26).

6. An integrated circuit (1) as claimed in Claim 1, characterized in that the electrical device (20) comprises an ohmic resistor having a resistance value, which is a function of the random parametric variations.

7. An integrated circuit (1) as claimed in Claim 6, characterized in that the ohmic resistor comprises a silicide material and has a shape, the random parametric variations comprising a random distribution of shapes.

8. An integrated circuit (1) as claimed in Claim 6, characterized in that the random parametric variations comprise a random distribution of insulating objects (49) in the ohmic resistor.

9. An integrated circuit (1) as claimed in Claim 8, characterized in that the first subset (12) comprises a random number of identification cells (13) each having ohmic resistors comprising a first part (50) and a second part (51), which is electrically insulated from the first part by the insulating objects (49).

10. A method for manufacturing an integrated circuit (1) as claimed in Claim 1, the integrated circuit (1) comprising a substrate (2) and a set of cells (10), each cell (11, 13, 15, 19) comprising an electrical device (20) having a device parameter with a parameter value which is a function of random parametric variations, the substrate (2) comprising a first portion (3) and a second portion (4), the method comprising a step which causes the cells (11, 13, 15, 19) to have the random parametric variations, characterized in that means for increasing the random parametric variations in at least a part of the first portion (3) with respect to the random parametric variations in the second portion (4) are applied during at least part of the execution of said step.

11. A method as claimed in Claim 10, characterized in that during at least a part of the step of applying the means for increasing the random parametric variations the second portion (4) is covered by a first mask (5) which at least partly prevents an increase of the random parametric variations in the second portion (4).

12. A method as claimed in Claim 11, characterized in that the step causing random parametric variations comprises a sub-step causing random parametric variations in at least a part of the second portion (4) while the first portion (3) is covered by a second mask (6) which at least partly prevents introducing the random parametric variations in the first portion (3) during the sub-step.

13. A method as claimed in Claim 10, characterized in that the step causing the random parametric variations comprises implanting doping atoms (28).

14. A method as claimed in Claim 13, characterized in that the means for increasing the random parametric variations comprise objects (31) randomly distributed over at least a part of the first portion (3), the objects (31) at least partly preventing doping atoms (28) from being implanted.

15. A method as claimed in Claim 13, characterized in that at least a part of the doping atoms (28) carry a charge when they are implanted and a deflection unit (41) randomly deflecting the charged doping atoms by applying a random deflection signal is used as the means for increasing the random parametric variations.